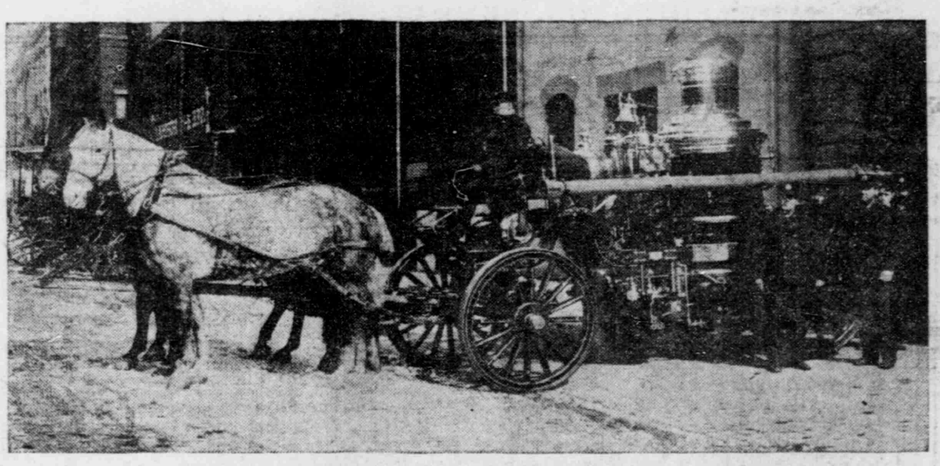
NEW APPARATUS FOR WASHINGTON FIRE FIGHTERS

Important Recent Improvements in Chief Dutton's Department, Both in the Installation of New Devices and in the Personnel of the Service, Now Puts the Capital in Rank With Other and Larger Cities of the United States.

Up-to-Date Steamers of the Latest Pattern, a Water Tower That Literally Furnishes a Deluge, Smoke Marks and Anti-Bouncing Life Saving Nets Now in Use—Firemen Well Paid and Under Perfect Discipline.



No. 14 Company's Brand New Engine.

WITHIN two years important improvements have been made in the District Fire Department. This is true alike of the installation of new devices to fight fires, in the personnel of the service, and in arrangements perfected to prevent the burning of buildings. These improvements have gone on to an extent which places the department practically upon a new basis.

The policy adopted by the present Chief Engineer, Robert W. Dutton, when he took charge of the department, was to adopt new apparatus as fast as the appropriations of Congress would allow; to improve the condition of the stationhouses and the discipline of the men, and to inaugurate systematic efforts, through inspection of buildings and their equipment with fire-escapes and special devices, to prevent fires. Chief Dutton believes his department owes as great a duty to the public in the way of avoidance of conflagration as in quelling it when once started.

To this end the Chief Engineer and the District Commissioners have worked in harmony. The latter have recommended to Congress the appropriation of money for apparatus for the latest style and improvement. Additional companies have been established, and all the suggestions of the Chief Engineer have been carried out as far as money was available therefor. The result is a vastly better fire-fighting force than existed two years ago.

One of the most costly and valuable pieces of new apparatus purchased is the water tower, quartered at Truck C house and available for all fire runs in the business section. The tower is one of the most perfect of its kind, and is so arranged that connection can be made, the extension pipes elevated, and a two inch stream sent in any direction desired within twenty seconds.

The New Water Tower.

The object of the water tower, however, is not so much quick work as throwing a large volume of water upon a building where the fire has gained headway and has grown too hot for the near approach of the firemen with ordinary apparatus. The water tower is not used at the majority of fires, but is a most effective piece of apparatus when its service is desired. Before the installation of the water tower the department could throw water upon fires only where the firemen could go with the hose of the ordinary equipment. With the tower streams of water can be carried to points much higher than any ladder would reach, and to points where the heat is so great that no man could live. More than that, the tower is capable of throwing a volume of water greater than two ordinary engines.

When working to its full limit two engines are attached and four lines of hose from separate hydrants. There is the stream at the top of the tower which can be directed at will in any direction at an elevation from below, and besides the apparatus is fitted with appliances for throwing one, two, or four additional streams of large volume from below. A two-inch stream of water can be thrown more than 110 feet high by the tower. This machine was used with good effect recently at the burning of the Moses & Sons' warehouse when it was necessary to flood the building with a great volume of water to put out the fire.

As accessory to the water tower, two of the truck companies have been fitted out with auxiliary Siamese two-line deluge sets, which are water towers on a small scale. A line of hose is carried up the highest ladder of the truck to a point fifty feet from the ground. Below are the two line attachments, and a cord running down enables the company to direct the stream. At the top is the Eastman deluge nozzle, which throws a two-inch stream from 180 to 200 feet. This appliance is used much as the water tower is, and they are intended to supplement it. Chief Dutton found it was desirable to provide the department with better facilities for use at big fires, and these deluge sets were installed at about one-half the cost of a supplementary water tower. In addition to these appliances the department has in use two-line sets for uniting in one stream both outlets of a single hydrant, and several of the engines are equipped with deluge nozzles, which can be put on when a large volume of water is required. Recently at the G Street fire, when the order was given to flood the basement of the building, these sets were attached, and the building literally deluged within a few minutes. Though the fire had attained great headway it was quenched as by an outpour from the skies.

Water Tower Ready for Action.

Since the purchase of the tower it has been refitted with nozzles and attachments so as to increase its efficiency 100 per cent. With the fittings it had at first a 1½-inch stream could be thrown 155 feet from the base of the tower. By the addition of the Hart tower nozzle the same stream can be thrown 256 feet.

Monster Steam Firefighters.

Soon after buying the water tower the Chief Engineer forwarded to the Commissioners a recommendation for the purchase of three new steam engines of the first class. An arrangement was effected whereby three old and practically useless engines could be traded in. The appropriation for the purchase of these engines was contained in the appropriation bill of last year. The engines were built by the American Fire Engine Company at Seneca Falls, N. Y. The new apparatus was delivered last month, and the engines are now in service as Nos. 2, 6, and 14. The illustration shows No. 14 in front of the house on Eighth Street northwest. The capacity of each of these engines is 1,100 gallons of water a minute, and the highest capacity of any engine in the department before their installation was 850 gallons. The advent of these powerful steamers, fitted with every improvement known to the best builders, has enabled the department to dispense with three of the oldest engines, which were of an old type. The Chief Engineer estimates that by the additions already mentioned the effectiveness of the department has been increased 200 per cent.

Along with the new apparatus a number of devices have been introduced for the comfort of the men and their effectiveness in working at fires. The most striking of these is the Miller face mask, which a fireman dons when it is necessary to enter a building filled with smoke to search for missing people, or to carry hose to a point where it can be used more effectively. This mask, shown in the illustration, is of leather and fits tightly over the head and face. In front is a piece of isinglass which enables the wearer to see. In front of the mouth is a fine-grained sponge, slightly wet, which enables him to breathe without getting smoke into his lungs. Clothed in one of these masks a fireman can go into a room where no man could exist a minute without the mask. He can breathe regularly for about five or six minutes, when the sponge begins to clog. At the test made of these devices the firemen remained in a room dense with smoke for sixteen minutes without suffering any inconvenience. This is long enough to find and carry out any person who might be left behind and overcome in a burning building. The Miller masks have been used by the department several times since their introduction. Each company has one in its regular equipment.

Latest in Life-Saving Nets.

Of similar utility are the Browder life-saving nets with which each truck company in the department has been provided. These are a curiously devised piece of apparatus which enables a person to jump from a great height and land without bouncing up or out of the net. In the old days when the firemen attempted to catch a person falling or jumping from a building, the landing in a blanket was oftener more dangerous than the risk of being overcome by the flames. If the blanket did not part and let the person jumping through with a heavy jolt to the ground he would bounce upward perhaps to a height of ten feet to be thrown upon the ground with the result of a broken limb. Now the jumper lands safely, from whatever height, and is never thrown off his feet.

Other pieces of apparatus added are the new chemical extinguishers of the underwriter type. The old hose carriages were equipped with a six-gallon extinguisher which required two men to lift and carry into a building. In the place of these are two three-gallon extinguishers more easily handled. In the old extinguisher it was necessary to break a bottle, and to wait for the mixture to dissolve before ready for use. Now all that is required is to turn the extinguisher upside down and it is ready for service.

Within two years also truck F, in Mount Pleasant, has been organized and gone into commission as a protection to that rapidly growing suburb. Chemical engine companies Nos. 3 and 4, at Tenleytown and Brookland, have been installed with new and complete apparatus. Within a few weeks also chemical engine company No. 5 will go into commission on Congress Heights. Appropriations have been made for a new engine company in Southwest Washington and for a new truck company in the Southeast section. Plans for the buildings are now in process of completion, and they will be built this year.

Protected by the New Smoke Mask.

An Up-to-Date Truck.

One of the best and most up-to-date pieces of apparatus in the department is the new truck A. This was delivered to the authorities about two months ago by the Seagrave Manufacturing Company. It is built of lighter materials and has numerous improvements over any other truck in the department. The 75-foot ladder was raised into position in the presence of The Times reporter in 17 seconds, carrying with it the deluge hose and nozzle, and at a fire would have been ready for operation as soon as the powerful engine could have raised the stream of water to a height of fifty feet, in perhaps five seconds.

This truck has rubber tires, and the wheels are set with ball bearings, and in running to fires on Capitol Hill Chief W. T. Belt, whose horse is stabled at truck A house, is obliged to whip up his nag lively to beat the truck to the scene of conflagration.

It is said that on one or two occasions Foreman Hooper has jovially called "Howd'y" to his chief on the fire ground as the latter pulled up.

Besides the big ladder the truck is fitted with a 50-foot ladder worked by hand, a 35-foot ladder and a 25-foot ladder. These are built of light wood and so braced as to hold six men without bending or sagging out of position.

The new truck cost $4,390, and the new engines $5,700 each.

Items are included in the forthcoming appropriation bill providing for the purchase of three new combination hose and chemical wagons. This piece of apparatus is a great improvement over the hose carriages now in use. They carry from 1,000 to 1,200 feet of hose in two compartments, and it is possible to lay out two lines at once, instead of one, and with much less danger of accident than by the hose carriage. In addition these wagons carry two 35-gallon chemical tanks to be used in emergency before the engines arrive. 1,200 feet of chemical engine hose is also a part of the equipment. It is the intention of the Chief Engineer to exchange the present hose carts for the combination wagons as fast as money is provided for the purpose.

Reforms in Personnel.

Chief Dutton has made as many reforms in the personnel of the department as in its apparatus. He recommended, and Congress authorized the granting of, twenty days' annual leave to the men in the department. Up to last year no man ever had a furlough, except on sick leave. Every man in the department is rewarded also with extra days of leave for brave and meritorious service. For example, if a foreman on his day off sees a fire and puts it out or sends in a local alarm to the nearest engine house, he is rewarded in this way. On the other hand, no man for neglect of duty or for other misdemeanor is now fined. He is deprived of certain days off, and this has been found an effective mode of punishment. Chief Dutton argued that when a fireman was deprived of his money by a fine, his family as well as himself would be the sufferers. He stopped the paying of money and took away the days of leave, so that the fireman only would feel the deprivation. By a judicious use of this mode of punishment and by positive dismissal on the second offense drunkenness has been practically banished from the department.

It may be said that the men are now better paid and under better and more effective discipline than ever before in the history of the department.

Chief Dutton, soon after being installed in office, began a systematic inspection of all public buildings, semi-public buildings, and others where large assemblages were held. In many cases hallways and exits were changed, the better to enable persons to get out of the buildings in case of fire. The regulations in regard to fire-escapes have been rigidly enforced. The storage and handling of oils and inflammable materials have been carefully looked after. Electric wiring his been improved. Details of firemen to theatrical performances for duty behind the scenes have been ordered. Attention has been given to protection from fire upon public occasions like the G. A. R. encampment and the Masonic fair. In short, as much attention has been given to preventing fire as to fighting it. The result has been that in the past calendar year there was less fire damage than for several years previously.

DICKENS' "LITTLE DORRIT" AS SHE IS TODAY

Who that has read Dickens has not loved and admired the "child of the Marshalsea," the sweet and charming Little Dorrit? All of us have loved her as a child of a bygone age, yet still "Little Dorrit" is among us, hearty and well, says "Black and White." Mrs. Mary Ann Cooper, of Southgate, now in her ninetieth year, is the original of Dickens' famous character, although the life depicted in the book cannot be said to correspond with her own, for Mrs. Cooper herself was never in that dreary debtors' prison. She was born on November 27, 1813, in Hatton Garden, her father being a well-to-do farmer named Mitton, who also had a place at Sunbury, at which Dickens in his early youth was a frequent visitor. The bed "Little Dorrit" now sleeps on at Southgate is one Charles Dickens slept on there.

A few years later the Mittons were living in Johnson Street, Clarendon Square, and a house directly opposite was occupied by the Dickens family. There began the acquaintance with "My Charles," as the old lady calls the novelist. Mrs. Cooper's brother was a school fellow of Dickens, and would assist him in his literary work by correcting manuscripts, as in later years he assisted him in law matters. Between Mary Ann and Charles the closest friendship—almost ripening into something more—sprang up, and the old lady is never tired of telling their adventures and misadventures in the heyday of youth—how they would call at a little place in the Hampstead Road, where Cecil Rhodes' grandfather, "a grumpy old man," would serve them with milk; how after church he would take her for a walk to "New St. Pancras Church" for the special purpose of staring at and taking off the pompous beadle who used to strut about its precincts—Dickens imitating his walk and bearing, to the delight of others, but to the great indignation of this prototype of Bumble; how Dickens was out walking when he met a procession of school girls from a sedate boarding school, headed by a particularly prim and severe principal, and how, seeing an old apple woman, Dickens bought up her stock and slyly slipped two apples into the hands of each girl and stood by when the horrified principal discovered her "very select" establishment munching apples in the street.

Once when staying at Mrs. Cooper's home at Sunbury, Charles went out, and, borrowing some old clothes, disguised himself as a farm laborer in search of work, and so clever was his make-up that he completely deceived the shrewd farmer, who, not having work for him, was prevailed upon to allow him a place and some straw in one of his barns, where he might pass the night.

Dickens had a habit of giving nicknames to his friends and relatives, as he had a way of giving literary names to his sons; his name for Miss Mitton was Little Dorrit. "Why did he give you this name?" I asked, and the old lady said: "I really cannot say. It seemed to come; at any rate, I only recollect that somehow I was always 'Dorrit' with Charles."

"And how did you come to get into the Marshalsea, and be famous ever afterwards?"

"Well, I cannot exactly say, but as I have told you, Charles and I were, I think I may say, very fond of one another, and one day at home he told us: 'The next book I write I shall put you in it, and I shall call it 'Little Dorrit.' Thus his next work was named."

Now, in her ninetieth year, Mrs. Cooper is lively and quick, although she has had some serious accidents in the course of her long life. Once she was thrown from her horse and dragged for three-quarters of a mile. She has suffered, too, from rheumatism, and is rather deaf. Mrs. Cooper has been a widow for over twenty years, and now lives alone—in a little room crammed with flowers and fancies, and a chimney corner which is a perfect gallery of portraits, with a notable one, of course, of "My Charles." Over the mantelpiece is one of those curious old "samplers" which our grandmothers used laboriously to produce, made by "Mary Ann Mitton, aged nine, February, 1822."—C. Pilkington.

THE PRESIDENT OF A GREAT RAILROAD SYSTEM

A MAN of large stature, who gives instantly the impression that he is a man of affairs and of power, that he is occupied with great problems, and yet is alert and observant, is seen coming up Cortlandt Street, New York, several times each week, making his way with great strides to the offices of the Pennsylvania Railroad Company, at Broadway and Cedar Street.

This is A. J. Cassatt, the president of the Pennsylvania Railroad.

When Mr. Cassatt returned to the work of railroad management three years ago, after a vacation of seventeen years, he was known as a breeder of fine horses, an enthusiast on the subject of good roads, a patron of outdoor sports, and a gentleman of leisure. Most people had forgotten that he was the man who in 1872, under the presidency of George B. Roberts, had snatched the Philadelphia, Wilmington and Baltimore Railroad from the Garretts. This was the making of the Pennsylvania as a great railroad system, and this master stroke was made when Mr. Cassatt was still a young man, only thirty-three years old, and with but eleven years of railroad experience to his credit.

In that time the young undersurveyor who had entered the service of the company under President John Edgar Thomson, in 1861, had risen to a position created for him in 1872—that of general manager of the Pennsylvania Railroad, and he had had a large share in the creation of the great transportation system which bears the name of the Keystone State. This coup of 1872 won for Mr. Cassatt a vice presidency, and in 1874 he became third, and in 1880 first vice president, and executive officer under President George B. Roberts.

Two years later, when he had made the Pennsylvania the best organized and best equipped railroad in America, Mr. Cassatt laid down his burdens and retired to private life that he might have leisure for travel and for the enjoyment of the life of a country gentleman. While he was abroad he was made a director of the road, and on his return he took his place in the board and served as a valuable adviser of the executive officers.

More active duties than these he refused to assume, and he devoted himself to breeding racehorses from the famous sire The Bard, at his Chester Brook Farm, at Berwyn, Pa. He was one of the prime movers in the Monmouth Park Association in New Jersey, but when "the outlaws" brought horse racing in that State under the ban of a constitutional prohibition, he sold his stud and turned his attention to the breeding of hackney horses. In order to improve the roads about his country home, Mr. Cassatt accepted the office of road supervisor of the township, and was re-elected twenty times.

He was absorbed in these pursuits when Frank Thomson, the president of the Pennsylvania Railroad, died, and on June 9, 1899, the board of directors elected Mr. Cassatt president. Vacation days were over for him. He took his place at the head of the corporation, the foundations of whose greatness he had helped to build two decades before.

Mr. Cassatt began immediately to do great things with characteristic rapidity, and it seems almost incredible in view of what he has accomplished that he has been at his task just three years and not thirty. His first notable move was to acquire large holdings in the Chesapeake and Ohio, Norfolk and Western, and Baltimore and Ohio, and establish a community of interest in the soft coal roads to preserve the Pennsylvania's dominance in the bituminous territory.

In order to secure for his railroads the traffic of the Great Lakes he took over the Erie and Western Transportation Company, with its great Buffalo terminals, and absorbing the Western New York and Pennsylvania Railroad he consolidated it with the Allegheny Valley. Then he turned his attention Eastward and pushed into entirely new territory by acquiring the Long Island Railroad, with its dockage franchises, and it is expected in some quarters that he will soon make the New York, New Haven and Hartford Railroad a part of the Pennsylvania system.

Grappling with the problem of carrying trains into the heart of the American metropolis, and establishing all-rail communication with the East, Mr. Cassatt perfected the plans which have now been approved by the rapid transit commission and the board of aldermen, and, having added $100,000,000 to the capital of his road, he is now prepared to bore the great tunnels which will give the Pennsylvania continuous rails from Montauk Point to Chicago and will bring passengers through from the West as well as from Long Island and into the very center of Manhattan Island without the discomforts and delays of ferriage.

Mr. Cassatt at sixty-three is a model of vigorous manhood, robust and hearty. Although president of seven companies and director in twenty-three, he devotes himself as assiduously to outdoor recreation as he does to the manifold duties of his responsible positions.

MACAULAY AS A SCHOOLBOY.

Zachary Macaulay placed his three younger sons, John, Henry William, and Charles, as pupils in the school kept by my grandfather, Richard Elwell, at Hammersmith, having previously, but vainly, urged him to admit thereinto the future great historian and essayist. And my uncle, Richard Elwell, who died in 1887, in his ninetieth year, told me that his father's reasons for refusing to admit young Thomas Babington into his school were: First—That the boy was above twelve years of age at the time of application; second, that he was "quite unlike other boys," of a peculiarly retiring disposition, delighting much in solitude, but yet perversely disinclined to study of any kind.—London Standard.